

In the Claims:

1. (Original) An electronic module for use in a wireless modem system comprising:

a wireless modem having an enclosure;

a power inserter circuit contained within the modem enclosure;

a power source electrically connected to the modem and the power inserter circuit; and

an output connector connected to the modem and the power inserter circuit;

wherein the output connector connects to an external transverter and supplies electrical power and an electrical signal to the transverter.

2. (Original) The electronic module of Claim 1, wherein the power inserter circuit comprises:

an inductor connected to the power source; and

a capacitor connected to the output of the modem , the inductor, and the transverter;

wherein the capacitor blocks DC power from entering the output of the modem and the inductor blocks IF energy from entering the power source.

3. (Original) The electronic module of Claim 1, wherein the power source is an AC-to-DC converter.

4. (Original) The electronic module of Claim 3, wherein the AC-to-DC converter is contained within the modem.

5. (Original) The electronic module of Claim 1, wherein the power source is a dual output voltage power supply.

6. (Original) The electronic module of Claim 1, further comprising:
a DC-to-DC converter contained within the modem enclosure and electrically connected to the power source and the modem;
wherein the DC-to-DC converter outputs a constant voltage to the modem regardless of a change in input voltage from the power source.

7. (Original) The electronic module of Claim 6, wherein the power source output voltage is set according to a transverter input voltage requirement.

8. (Original) A wireless modem system comprising:
a wireless modem having an enclosure;
a power inserter circuit contained within the modem enclosure;
a power source electrically connected to the modem and the power inserter circuit;
a DC-to-DC converter contained within the enclosure electrically connected to the power source and the modem;
an output connector connected to the modem and the power inserter circuit;
a transverter electrically connected to the output connector; and
an antenna connected to the transverter;
wherein the transverter receives DC power from the power inserter circuit along with an electrical signal from the modem, and the power inserter circuit isolates the modem components from the DC power sent to the transverter and isolates the power source from the electrical signal sent to the transverter.

9. (Original) The system of Claim 8, wherein the DC-to-DC converter outputs a constant voltage to the modem regardless of a change in input voltage from the power source.

10. (Original) The system of Claim 9, wherein the power source output voltage is set according to a transverter input voltage requirement.

11. (New) A cable system, comprising:

a broadband cable TV and telecommunications related services transmission network comprising multiple nodes on an earth based delivery system configured to transmit broadband services to multiple pluralities of end-users;

a plurality of wireless head ends coupled at various points to the earth based delivery system, each head end configured to wirelessly provide the broadband services to a plurality of end user locations;

a wireless modem comprising a modem and a transverter installed as a modem transverter pair at each end user location;

a single cable installed between the modem and transverter of each modem transverter pair;

wherein:

each modem includes a power inserter maintained in a same enclosure as the modem; and

components of the modem and power inserter are coupled to the single cable and configured to supply power and data signals to the transverter through the single cable.

12. (New) The cable system according to Claim 12, wherein:

the modem and power inserter enclosure is powered by a dual power supply comprising a single external power supply module and individual power leads; and

the individual power leads consist essentially of a first voltage power lead specifically for powering modem related components in the enclosure, a second voltage power lead specifically for powering power inserter related components in the enclosure, and a ground lead shared by the first and second voltage power leads.

13. (New) The cable system according to Claim 12, wherein the power inserter comprises a circuit configured to shield the dual power supply from IF energy emanating from an output of the modem components

14. (New) The cable system according to Claim 13, wherein the power inserter circuit is further configured to shield the output of the modem components from unintended DC power insertion from the dual power supply.

15. (New) The cable system according to Claim 11, wherein:

the modem and power inserter enclosure includes a dc-to-dc transformer coupled to modem components within the enclosure; and

the modem components and power inserter in the single enclosure are powered by a dc power supply coupled to components of the power inserter and the dc-to-dc transformer.

16. (New) The cable system according to Claim 15, wherein the power inserter comprises a circuit configured to shield the dc power supply from IF energy emanating from an output of the modem components

17. (New) The cable system according to Claim 15, wherein the power inserter comprises a circuit configured to shield the output of the modem components from unintended DC power insertion from the dual power supply.

18. (New) The cable system according to Claim 11, wherein the power inserter comprises a circuit configured to shield a power supply of the enclosure from IF energy emanating from an output of the modem components

19. (New) The cable system according to Claim 18, wherein the power inserter circuit is further configured to shield an output of the modem components from unintended DC power insertion from the power supply.

20. (New) The cable system according to Claim 19, wherein the head ends are coupled to the network at a coaxial cable delivery system.

21. (New) The cable system according to Claim 19, wherein at least one of the delivery systems is a Hybrid Fiber Coax (HFC) system.